SEQUENCE LISTING

<110> Clark, Edwin
Grenfell, Tallessyn
Lu, Karen
Hartmann, Lynn
Brown, Jeffrey L.

<120> NOVEL COMPOSITIONS AND METHODS FOR THE IDENTIFICATION, ASSESSMENT, PREVENTION AND THERAPY OF HUMAN CANCERS

<130> MRI-027

<150> US 60/267,276
<151> 2001-02-08

<160> 19

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 242
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 57, 62, 71, 78, 117, 133, 137, 207, 219, 226, 229
<223> n = A,T,C or G

<400> 1
aggtacaagc ttttttttt tttttttttt ttttttttt tcctactgga atcgttnaat 60
gngtctactt nttccacnca taattataaa agaataagaa tcgacaaaaa tattttnttt 120
ccataatatg tanaggnggt tggtttcttt ttttttttt ttcttttctt ttaacttttt 180
ttttttttt tttttttttt gggctcnaaa gggggtagng ggggtnctnt aggacctgcc 240
cg 242

<210> 2
<211> 417
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 338, 349, 388
<223> n = A,T,C or G

<400> 2
tttatgagaa agcagctatt aaaggtagag tgattcaagt ctataaggca atttatattc 60
tatatttagt ttttcattct gaatagactg aaaaaatata tgaattagaa atttatttaa 120
gaccatcttt cttttgttgc ttttttaaa catttacttt tctttaagcc ataaggatgc 180
ataaattata cagggcatga ccttatgagt aacatcaaca ggtatttcag aaataacaga 240
acacgtctag aaatgtatgg tggtaatatt aatctataca ttttttggca tgatttgtac 300
attgacattg tatgaaatga gcacactgag ggtttttngg tggtactgnc gcatccaagg 360
aggttgggga gaactatata agaatgtntt ataatcacta ttttaaataa agtaaaa 417

<210> 3
<211> 512
<212> DNA
<213> Homo sapiens

<400> 3
cgtgactgag gacagtgaaa agagcccacc tggtgtagag tgctcatttt agctgccaag 60
aaaagcctaa tttattttca gggcaaaact tctgcactgg gacaaatgtc ttcattataa 120
tccaaaagca gcatcaggaa aagaagctga actgtgcgaa tagaaatgaa tggggctgct 180
gctgctgctg ctgctttctt tttaatcagt agaaatggaa ttctgcctgc caaacagaag 240
tctaggagga acctgcagac ggcccctgta ctgagggcat tttgtcaggg cttaaagcaa 300
ccttcaagat catgacactc tgctatgagg accgaaagaa cttggagata aatatacatg 360
tactatgtgg tgggaccgat tttgaatctg aactaaatta aatgatggaa aacgaccttg 420
ggtgagttca ttcatggctg aacttgctgg gaatgataca acttttcaaa ataatttgtt 480
tccttcaaat gacaccaaca cctatagtta ag 512

<210> 4
<211> 356
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 1, 17, 24, 39, 95, 98, 113, 116, 130, 143, 153, 154, 155,
164, 165, 172, 174, 190, 192, 198, 202, 206, 207, 238, 245,
246, 247, 253, 285, 295, 299, 300, 302, 338
<223> n = A,T,C or G

<400> 4
ncggttgaac tacgganaac aacncgctgc cttcacagna cctagagtct cctttggagc 60
taccaacctc gccgaaggta cggcgacaca gacgngangt gtacaagctt ttntanatgg 120
tggatattcn acaattaaat tcntacgtac tcnnngtcca gtcnngagtc cnantgagct 180
gtttgctaan tnatgaantt cnttcnngca cgtgaagggc aaagagaaat aagggccnac 240
ttccnnnaag ggnttcctcg cgcatttagg tatcaggctt acttnagtat gtatngccnn 300
cntccgagcg ggagagccaa gggtgtcgta taaaattnaa aggaataaca taaaaa 356

<210> 5
<211> 577
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 53, 58, 59, 143, 173, 197, 242, 303, 432, 491, 504, 514, 537
<223> n = A,T,C or G

<400> 5
gtcgaccccg cgtccgctta gggaactgca atattataag tatagtaatg acngcagnng 60
agaaccataa tgatggcctc cccggcaaag aagaaccaac ccgtgttacg cctgaggttg 120
caatttttg aatttttgca gtnagaccct ggcgatgacc ttgagcagta ggngataaat 180
tccacatgct tagcgtncca gtaatggaac actaggcata aatgggttat taaagtatcc 240
anaattaaca tgcttagctg tgacattgga aaggcaatgt gtttgctgtg gcacacatac 300
tantaaataa tgactggtcc gaatttggtt ttcgtttgtc tattaaagtc aatttactaa 360
ggcagggagg gcccagagct gtgctgtcca gttcaatagc catgcgtgac tgctaaggac 420
ttccaaagtg gntagtccaa tgtcaggtat gctgcaagtg tcaaacacac actggatttc 480
aaagactaaa nccaaaaaaa tgtnaaatca tctnaatatt ttggttatac tcggttnaag 540
aaaataaaat tatttttgcc ttttatgttt ttaaaag 577

<210> 6
<211> 331
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> 3
<223> n = A,T,C or G

<400> 6
ggncaccaca ctctacaaag gcagtcaact acatgacaca ttccgcttct gcctggtcac 60
caacttgacg atggactccg tgttggtcac tgtcaaggca ttgttctcct ccaatttgga 120
ccccagcctg gtggagcaag tctttctaga taagaccctg aatgcctcat tccattggct 180
gggctccacc taccagttgg tggacatcca tgtgacagaa atggagtcat cagtttatca 240
accaacaagc agctccagca cccagcactt ctacctgaat ttcaccatca ccaacctacc 300
atattcccag gacaaagccc agccaggcac c 331

<210> 7
<211> 446
<212> DNA
<213> Homo sapiens

<400> 7
ccctcgcggt ggcgggcgag gtgcatcacc ctgctgaggg acatccagga caaggtcacc 60
acactctaca aaggcagtca actacatgac acattccgct tctgcctggt caccaacttg 120
acgatggact ccgtgttggt cactgtcaag gcattgttct cctccaattt ggaccccagc 180
ctggtggagc aagtctttct agataagacc ctgaatgcct cattccattg gctgggctcc 240
acctaccagt tggtggacat ccatgtgaca gaaatggagt catcagttta tcaaccaaca 300
agcagctcca gcacccagca cttctacctg aatttcacca tcaccaacct accatattcc 360
caggacaaag cccagccagg caccaccaat taccagagga acaaaaggaa tattgaggat 420
gcgctcaacc aactcttcga aacagc 446

<210> 8
<211> 497
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 497
<223> n = A,T,C or G

<400> 8
tacttagggc gaattggagc tccccgcggt ggcggccgag gtacgcggga gataagaccc 60
tgaatgcctc attccattgg ctgggctcca cctaccagtt ggtggacatc catgtgacag 120
aaatggagtc atcagtttat caaccaacaa gcagctccag cacccagcac ttctacctga 180
atttcaccat caccaaccta ccatattccc gggacaaagc ccagccaggc accaccaatt 240
accagaggaa caaaaggaat attgaggatg cgctcaacca actcttccga aacagcagca 300
tcaagagtta tttttctgac tgtcaagttt caacattcag gtctgtcccc aacaggcacc 360
acaccggggt ggactccctg tgtaacttct cgccactggc tcggagagta gacagagttg 420
ccatctatga ggaatttctg cggatgaccc ggaatgggta cctgcccggg ccggccgctt 480
cggctttaga actagtn 497

<210> 9
<211> 488
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 27
<223> n = A,T,C or G

<400> 9
atagggcgaa ttggagctcc ccgcggnggc ggccgaggta ccattccggg tcatccgcag 60
aaattcctca tagatggcaa ctctgtctac tctccgagcc agtggcgaga agttacacag 120
ggagtccacc ccggtgtggt gcctgttggg gacagacctg aatgttgaaa cttgacagtc 180

agaaaaataa ctcttgatgc tgctgtttcg gaagagttgg ttgagcgcat cctcaatatt 240
ccttttgttc ctctggtaat tggtggtgcc tggctgggct ttgtcctggg aatatggtag 300
gttggtgatg gtgaaattca ggtagaagtg ctgggtgctg gagctgcttg ttggttgata 360
aactgatgac tccatttctg tcacatggat gtccaccaac tggtaggtgg agcccagcca 420
atgggaatga ggcattcagg gtcttatcta gaaagacttg ctccaccagg ctggggtcca 480
aattggag 488

<210> 10
<211> 463
<212> DNA
<213> Homo sapiens

<400> 10
ccgcggtggc ggccgcccgg gcaggtacat caccctgctg agggacatcc aggacaaggt 60
caccacactc tacaaaggca gtcaactaca tgacacattc cgcttctgcc tggtcaccaa 120
cttgacgatg gactccgtgt cggtcactgt caaggcattg ttctcctcca atttggaccc 180
cagcctggtg gagcaagtct ttctagataa gaccctgaat gcctcattcc attggctggg 240
ctccacctac cagttggtgg acatccatgt ggcagaaatg gagtcatcag tttatcaacc 300
aacaagcagc tccagcaccc agcacttcta cctgaatttc accatcacca acctaccata 360
ttcccaggac aaagcccagc caggcaccac caattaccag aggaacaaaa ggaatattga 420
ggatgcgctc aaccaactct tccgaaacag cagcatcaag agt 463

<210> 11
<211> 302
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 6, 52, 53
<223> n = A,T,C or G

<400> 11
accgcngtgg cggccgcccg ggcaggtaca tcaccctgct gagggacttt tnnggacaag 60
gtcaccacac tctacaaagg cagtcaacta catgacacat tccgcttctg cctggtcacc 120
aacttgacga tggactccgt gttggtcact gtcaaggcat tgttctcctc caatttggac 180
cccagcctgg tggagcaagt ctttctagat aagaccctga atgcctcatt ccattggctg 240
ggctccacct accagttggt ggacatccat gtgacagaaa tggagtcatc agttttatca 300
ac 302

<210> 12
<211> 534
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 18, 463, 474, 518
<223> n = A,T,C or G

<400> 12
agggcgaatt ggagctcncc gcggtggcgg ccgaggtacc acctgaaggc cctcacactc 60
aacttcacca tctccaatct ccagtattca ccagatatgg gcaagggctc agctacattc 120
aactccaccg agggggtcct tcagcacctg ctcagaccct tgttccagaa gagcagcatg 180
ggccccttct acttgggttg ccaactgatc tccctcaggc ctgagaagga tggggcagcc 240
actggtgtgg acaccacctg cacctaccac cctgaccctg tgggccccgg gctggacata 300
cagcagcttt actgggagct gagtcagctg acccatgggt gtcacccaac tgggcttcta 360
ttgtcctgga cagggatagc ctcttcatca atggctatgc accccaaaat ttatcaatcc 420
gggggcgagg tacctgcccc gggcgggccg cttaaaacta ggnggggatcc cccnggcttg 480
caggaatttc gatattcaag cttatcgata cccgtccnac cttcgagggg gggg 534

<210> 13
<211> 290
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 15, 16, 39, 41, 71, 106, 129, 137, 140, 149, 164, 167, 226, 245, 251, 263, 268
<223> n = A,T,C or G

<400> 13
tgggggaaag ggagnnccca acgatcctgg aactttaant ntggaaagag tgagattcag 60
aaatcgccac nactggactt taagggacgt cctgtgtcag cacaanggac tggcacacac 120
agacacacna gaccgangan aaactgcana caaatggaga tacnaanact tagaaggaca 180
gctcctttca cctcatccta cttgtccaga aggtaaaaag acacanccag aaagaaaagg 240
catcngctca nctctcagat cangacangc tgtggatctg tggcggtact 290

<210> 14
<211> 430
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 93, 315, 407
<223> n = A,T,C or G

<400> 14
gcgtccgaat ttcctgggta ccccgtatat aagaaaatgt taaagtcagg caggaaaact 60
atagaattaa agccttatag tatattatat agnaaagccc tatatagtat agacagaaaa 120
gtttagggaa ggcccacaat tgcaaagaaa agtggtggtc acggaacaag ggaatgtcat 180
acaaatgtgg acacacactg cgttactgag cgccacgtct cataggtgag aagcataact 240
ctagaaggtg agaaatgaga attttcactt ccatccttcc atttgttgtg tgactctgcc 300
atttactttc ctttnttttg tattttcatt ttccttttaa aaatggaaat atgaattttg 360
aatttctgct ctatctcaca ggtttttttgt ggggatgcat ttaaaangtt taattagtaa 420
ataatggtat 430

<210> 15
<211> 435
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 39, 242, 363, 393, 404, 406, 412
<223> n = A,T,C or G

<400> 15
ccaaactatt tggacagaat ggcttcaaaa gctaggcgna aatgttcaca ttataaaaag 60
ttaaatatta ccttcaatac ctgtcagtag cctactgaca aattatgact aaacaaaggt 120
atttgtatga ctatgtaata gatcatccgc tgaaaagtaa aacaaaataa caaaaaaact 180
tgtcctaatg ggaaagcatg cttaataaaa ggaaatgcac gaagttataa acatgttttg 240
tnagtaagta ttcagaatta aaattatgtg atacattttt atgattgctt aatgatcctt 300
ggatgtcaga ttccttgggt ctatttatag ctaaattata atgaaaaatt caaggcttgc 360
tgnagcaact ctgtcaacaa atatattagt ttngcttata tatntngatt cnttatgtgg 420
gaaaaattac taccc 435

<210> 16
<211> 493
<212> DNA

<213> Homo sapiens

<400> 16
cggccggccc gggggatgcc gagtcccaag aggccgagtt tgagaggctg gtggcagaat 60
tcccggagaa ggaggcccag ctgtccctgg tggaagcgca gggctggctg gtgatggaga 120
agtctttctcc ggagggtgct gccgtggtgc aggaggagct cagggagctg gcagagtcgt 180
ggcgggcctt gaggctgctg gaagaaagtc tgctgagcct catcagaaac tggcatctgc 240
agaggatgga agtggattcg gggaagaaaa tggttttcac caacaacatc ccaaagtcag 300
gatttctcat caatcccatg gatcctattc ccaggcatcg tcgacgcgtg agtctgtcta 360
gcagggctgt gggagaaggg gccaggcccc aggtcaagag gtgggtaggg gtctccagca 420
caggcccctc cctgtctggg gcaacatgct ctgctctgag gactttggcca cgtcctgtct 480
catttgagcc tgc 493

<210> 17
<211> 315
<212> DNA
<213> Homo sapiens

<400> 17
gcgtccggtt acaaagtcag gttgttatgg tttgcatgac tttgagaagc tagtggaatg 60
gaaataaagt taggagcagc aggaggaggc tctgtgtggg cacatctcct tcaggggcat 120
ggtactgttc atggacagag gaagtcctat ggcatatgct gggacagaca gtgaagggta 180
ggtcttacaa agaggcttta cgttagagta taataatcac ttatctgtat gcatctatga 240
atgatctcac cggatgtgaa gaatatgtat ttttaaaaac agcatgaaac ggcctgtaat 300
cccagtactt ttggg 315

<210> 18
<211> 339
<212> DNA
<213> Homo sapiens

<400> 18
acttattgaa tcatcgaatt cattgaagtt tggctccaac ctatcatatc gccgatgttt 60
actttttcct attcttcata aagttctaaa ttcagaatgt gaggtggaca aattcatttc 120
agttccacaa gtggtagcat ttaaatatca gcagcttaag tattcaaaat taatagattg 180
catttttaaa atggtgaaat tctgacagtt tgcagggaaa aggtgctgaa tatcttgata 240
taatttacat acttctataa acaggcattt ttatacctttt ggaaagataa atgagtagaa 300
accaagtatt ttacaattct aatagttata ctgacatgt 339

<210> 19
<211> 520
<212> DNA
<213> Homo sapiens

<400> 19
tccgctaaaa atttgttcgg gcctttggct taattcagag atctgcccat ggggttctat 60
tactttgctc tttaactttg ttcgatcctt cttggatcag tcttgcaatt cattcttgtc 120
ttttcctgaa taacatctat gttttgccct cttttgagtg ctatcttaat atgccagcct 180
atttctacct ttcttgtgca gggtagcata atttttactt tccattatac ctcagtccca 240
caccttgttg tctgtttatt tcaataccta agatacttat cctcagttcc tagcttactt 300
tagttctgaa agttggatat ccataattgt agtggtctta aatctgtaaa acacatatgg 360
atgggaaacc actgaataat gtaaataaat atgaataacg atgataaaat aaaaatgata 420
aaaataactg agttcaatga tattaaaaac ataagtcagt ttaactattt ttttttgag 480
acaggggctc tgtcaccaag gctagagctg cagtgagtca 520